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Document Processing Center EPA East – Room 6428 Attn: Section 8(e) Office of Pollution Prevention and Toxics US EPA 1200 Pennsylvania Avenue NW Washington DC 20460-0001

RE:

TSCA 8(E) SUPPLEMENTAL SUBMISSION:

Docket No. 8EHQ-0602-00373

Dear Docket Coordinators:

Contain NO CSI

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3M has previously informed the EPA (May 29, 2002) of the results of a rat 28-day oral gavage study with triphenylbenzyl phosphonium cation/N-methyl perfluorooctanesulfonamide salt (TPBP C8 amide; PMN 88-141) that indicated hepatic toxicity.

In today's submission, 3M provides results from ecotoxicity studies conducted on TPBP C8 amide. Notox Safety and Environmental Research conducted a 96-hour acute toxicity study in zebra-fish (*Danio rerio*), an acute toxicity study in *Daphnia magna*, and a 96-hour fresh water algal growth inhibition test. Preliminary results indicate that the acute EC_{50} value for zebra-fish is < 1.0 mg/L, the acute EC_{50} value for the algae *Selenastrum carpicomutum* is < 0.05 mg/L, and the acute EC_{50} value for *Daphnia magna* is < 0.05 mg/L.

3M believes environmental exposure to TPBP C8 amide is unlikely. The material is used as a fluoroelastomer curative at concentrations less than 5% and is entirely mixed with the fluoroelastomer gum. The customer cures the fluoroelastomer mixture to form final articles (such as o-rings, and hoses) at high temperatures. By the end of the curing process, the fluorochemical part of the complex covalently bonds to the polymer backbone and the phosphonium cation thermally decomposes to triphenyl phosphine oxide and toluene. Based on our knowledge of the manufacturing processes and downstream uses of the material, the only potential pathway for release of the chemical appears to be through the air. 3M believes that the material is not released to the air, however, because it is not volatile and because air testing conducted during of the cure process forming the final article did not detect the TPBP C8 amide.

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A copy of the final report will be forwarded to EPA when received.

Please contact Susan Beach (651-778-7452) if you have any questions or if we can provide additional information.

Sincerely,

Katherine E. Reed Staff Vice President

Environmental Technology and Safety Services

Katherine E. Reel